



SS7 Overview

Course Length: 2 days

Description: SS7 Overview will give you a basic understanding of the architecture and operational issues of the Common Channel Signaling (CCS) network and Signaling System 7 (SS7) protocol. This course describes how intelligent networking and its applications are used to support many of the features that are deployed throughout both the wireline and wireless networks today. This will provide a thorough foundation for a more advanced study of the SS7 protocol.

Course Outline:

- **CCS Concepts**
 - ✓ Basic terms and definitions
 - ✓ Why deploy CCS?
 - ✓ Examples of signaling (CAS & CCS)
 - ✓ Advantage of CCS
 - ✓ Services offered with CCS

- **CCS Architecture**
 - ✓ Switches (SSP)
 - ✓ Signal Transfer Points (STP)
 - ✓ Service Control Points (SCP)
 - ✓ Advanced Intelligent Networks (AIN)
 - ✓ Linksets and Links
 - ✓ Interconnection Arrangements

- **The SS7 Protocol**
 - ✓ Documentation
 - ✓ Message Transfer Part (MTP)
 - Data Link
 - Link
 - Network - routing
 - ✓ SCCP
 - Global Title Translation (GTT) routing
 - ✓ TCAP
 - Examples of applications
 - ✓ ISDN-UP
 - Examples of trunk set up

- **Applications**
 - ✓ Documentation
 - ✓ Advance Intelligent Network (AIN)
 - ✓ CLASS Services
 - ✓ Toll-Free Services
 - ✓ Local Number Portability (LNP)
 - ✓ Mobile Applications
 - ANSI-41
 - GSM
 - Wireless Number Portability (WNP)
 - Wireless E911
 - ✓ ITU Core-INAP

Exercises are provided throughout the course, reinforcing a practical understanding of the material.

What You Will Learn: In this course you will learn terminology and concepts of the CCS network and the SS7 protocol. We will examine services that are offered using this network. The student will gain a thorough knowledge of network architecture and interconnection arrangements including today's routing. Appropriate documentation will also be introduced.

Who Will Benefit From This Course: This course will be an invaluable tool for those individuals responsible for maintenance and surveillance of the voice or signaling network. Others who would benefit would include planners, network or traffic engineers, Network Operations or technical support personnel and interconnection specialists.

Course Prerequisites: None

Instructors: All of our instructors have years of experience developing and teaching technical courses at Telcordia Technologies (Bellcore) Learning Services in Lisle, IL. They are all SS7 certified and CompTIA CTT+ Certified Professionals.

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